



Product: [4694ANH](#) 

12 GHz Coax, 4K UHD Precision Video Coax, RG-6/U Type, 75 Ohm, 18 AWG Solid, CMG-LS

Product Description

12 GHz Coax, 4K UHD Precision Video Cable, RG-6/U Type, 75 Ohm, 18 AWG solid .040" silver plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to core + tinned copper braid shield (95% coverage), LSZH jacket.

Technical Specifications

Product Overview

| | |
|------------------------|-----------------------------------------------------------------------------------------|
| Suitable Applications: | SMPTE 2082-1 12 Gb/s UHD TV, SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080P |
|------------------------|-----------------------------------------------------------------------------------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
|-----|-----------|----------------------|------------------|-------------|
| 18 | Solid | SC - Silvered Copper | 0.040 in | 1 |

Insulation

| Material | Nominal Diameter |
|--------------------------|------------------|
| PE - Polyethylene (Foam) | 0.180 in |

| | |
|--------------|--------------|
| Table Notes: | Gas Injected |
|--------------|--------------|

Outer Shield

| Type | Layer | Material | Material Trade Name | Coverage [%] |
|-------|-------|-------------------------------|---------------------|--------------|
| Tape | 1 | Tri-Laminate (Alum+Poly+Alum) | Duofoil® | 100% |
| Braid | 2 | Tinned Copper (TC) | | 95% |

Outer Jacket

| Material | Nominal Diameter |
|-------------------------------------------------|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 0.274 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Outer Conductor DCR |
|-----------------------|---------------------|
| 6.4 Ohm/1000ft | 2.8 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 15.9 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.106 µH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 75 Ohm |

Return Loss (RL)

| Frequency [MHz] | Minimum Return (RL) |
|----------------------|---------------------|
| 5 MHz - 1600 MHz | 23 dB |
| 1600 MHz - 4500 MHz | 21 dB |
| 4500 MHz - 12000 MHz | 15 dB |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.23 dB/100ft |
| 3.58 MHz | 0.44 dB/100ft |
| 5 MHz | 0.51 dB/100ft |
| 6 MHz | 0.56 dB/100ft |
| 7 MHz | 0.59 dB/100ft |
| 10 MHz | 0.70 dB/100ft |
| 12 MHz | 0.75 dB/100ft |
| 25 MHz | 1.04 dB/100ft |
| 55 MHz | 1.45 dB/100ft |
| 67.5 MHz | 1.58 dB/100ft |
| 71.5 MHz | 1.62 dB/100ft |
| 88.5 MHz | 1.78 dB/100ft |
| 100 MHz | 1.89 dB/100ft |
| 135 MHz | 2.10 dB/100ft |
| 143 MHz | 2.16 dB/100ft |
| 180 MHz | 2.44 dB/100ft |
| 270 MHz | 2.97 dB/100ft |
| 360 MHz | 3.45 dB/100ft |
| 540 MHz | 4.30 dB/100ft |
| 720 MHz | 5.00 dB/100ft |
| 750 MHz | 5.10 dB/100ft |
| 1000 MHz | 5.90 dB/100ft |
| 1500 MHz | 7.30 dB/100ft |
| 2000 MHz | 8.50 dB/100ft |
| 2250 MHz | 9.10 dB/100ft |
| 3000 MHz | 10.6 dB/100ft |
| 4500 MHz | 13.2 dB/100ft |
| 6000 MHz | 15.5 dB/100ft |
| 12000 MHz | 23.0 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|------------------------------------------|
| 1.20 ns/ft | 85% |

Voltage**UL Voltage Rating**

300 V RMS

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

| | |
|-----------------------|----------------|
| Operating Temp Range: | -30°C To +75°C |
|-----------------------|----------------|

Mechanical Characteristics

| | |
|------------------------------|---------------|
| UV Resistance: | Yes |
| Bulk Cable Weight: | 41 lbs/1000ft |
| Max. Pull Tension: | 69 lbs |
| Min. Bend Radius/Minor Axis: | 2.75 in |

Standards

| | |
|-----------------------|--------------|
| NEC/(UL) Compliance: | CMG-LS |
| CEC/C(UL) Compliance: | CMG-LS |
| CPR Euroclass: | Dca-s1,d1,a1 |

| | |
|----------|---|
| RG Type: | 6 |
|----------|---|

Applicable Environmental and Other Programs

| | |
|----------------------------------------------|-------------------------------|
| Environmental Space: | Indoor - Euroclass Dca |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |

Suitability

| | |
|------------------------------------|----------------------------------------------------|
| Suitability - Aerial: | Yes - Black only, when supported by messenger wire |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes - Black only |

Flammability, LSOH, Toxicity Testing

| | |
|---------------------|---------------|
| C(UL) Flammability: | FT4 |
| CSA Flammability: | FT4 |
| IEC Flammability: | IEC 60332-1-2 |

Plenum/Non-Plenum

| | |
|----------------|-------|
| Plenum (Y/N): | No |
| Plenum Number: | 4694P |

Related Part Numbers

| | |
|--------------------|-------|
| Non-Plenum Number: | 4694R |
|--------------------|-------|

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|-----------------|-------------|-------------|----------|--------------|
| 4694ANH G751000 | Aqua | Reel | 1,000 ft | 612825437369 |
| 4694ANH G751640 | Aqua | Reel | 1,640 ft | 612825437208 |
| 4694ANH G753280 | Aqua | Reel | 3,280 ft | 612825437253 |
| 4694ANH 0101000 | Black | Reel | 1,000 ft | 612825437185 |
| 4694ANH 0101640 | Black | Reel | 1,640 ft | 612825437246 |
| 4694ANH 0103280 | Black | Reel | 3,280 ft | 612825437291 |
| 4694ANH 0061000 | Blue, Light | Reel | 1,000 ft | 612825437178 |
| 4694ANH 0061640 | Blue, Light | Reel | 1,640 ft | 612825437222 |
| 4694ANH 0063280 | Blue, Light | Reel | 3,280 ft | 612825437277 |
| 4694ANH N3U1000 | Mil Green | Reel | 1,000 ft | 612825437161 |
| 4694ANH N3U1640 | Mil Green | Reel | 1,640 ft | 612825437215 |
| 4694ANH N3U3280 | Mil Green | Reel | 3,280 ft | 612825437260 |
| 4694ANH 0071000 | Purple | Reel | 1,000 ft | 612825437192 |
| 4694ANH 0071640 | Purple | Reel | 1,640 ft | 612825437239 |
| 4694ANH 0073280 | Purple | Reel | 3,280 ft | 612825437284 |

Product Notes

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| Notes: | Print legend includes sequential footage marks. |
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History

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| Update and Revision: | Revision Number: 0.117 Revision Date: 12-15-2021 |
|----------------------|--------------------------------------------------|

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